Abhishek Agrawal

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Education

Aix-Marseille Université, Marseille   Oct 2022 – Oct 2025

Ph.D. candidate in Computational Linguistics and Cognitive Science
Thesis:"Communicative Coordination in Child-Caregiver Interactions"

Charles University, Prague   Oct 2018 – Oct 2020

Master's in Computational Linguistics
Thesis: "Eye-tracking Features in Syntactic Parsing"

University of Pune, Pune   Aug 2012 – Jun 2016

Bachelor's in Computer Science

Honors & Awards

Best paper awarded for the paper titled "Eyes on the Parse: Using Gaze Features in Syntactic Parsing" by Agrawal & Rosa at the Second Workshop on Beyond Vision and LANguage: inTEgrating Real-world kNowledge (LANTERN).

Dean's Scholarship (2019) awarded for excellent study results in the previous academic year at Charles University.

Computational Linguistics Scholarship (2018-2020) awarded by the Faculty of Mathematics and Physics at Charles University, Prague, Czechia.

Dhirubhai Ambani Undergraduate Scholarship (2012-2016) awarded for excellent performance in the HSC (10+2) exam

Maharashtra Government Scholarship (2012-2016) awarded for excellent performance in the HSC (10+2) exam

Work Experience

NLP Engineer, Merck Sharpe & Dohme – Prague, Czechia   Aug 2020 – Sep 2022

- Added statistical models based on the SpaCy framework to the internal Named Entity Recognition (NER) API to recognize more entities.
- Designed a system similar to a Question & Answer system to help the internal CMC team quickly answer the questions posed by governmental regulatory agencies like the United States Food & Drug Administration, etc. by searching amongst various internal data sources.
- Provided NLP consultancy by answering questions and working on Proof of Concept for different internal teams within the company for their use cases.

Machine Learning Intern, Merck Sharpe & Dohme – Prague, Czechia   Nov 2018 – July 2020

- Worked on a project called Privacy-Preserving Analytics which intends on preserving the privacy in documents circulated within the company via Confluence, Outlook, etc. with the help of Named Entity Recognition, rules, and machine learning.
- Worked on a project called SDLC checker which automates the checking of SDLC documents as per some guidelines set out by the SDLC team with the help of machine learning and different rules.

Software Developer, Barclays Technology Center – Pune, India   Aug 2016 – June 2018

- Delivered the Enterprise Campaign Management System for Check Campaigns as a single page application and helped reduce the dependency on the old Campaign Desktop Tool.
- Worked on delivering the Enterprise Campaign Management System for Acquisition Campaigns. The acquisition campaigns generate around 80% of the revenue (Barclaycard US) in the United States of America.

Publications

Journal papers:

1. **Agrawal, A.**, Favre, B., & Fourtassi, A. (under review). Mapping the Communicative Landscape of Early Child-Caregiver Dialogue.

Peer-reviewed proceedings:

1. **Agrawal, A.**, Favre, B., & Fourtassi, A. (2025). Identifying Repair Opportunities in Child-Caregiver Interactions. Proceedings of the 29th Workshop on the Semantics and Pragmatics of Dialogue (SemDial)

2. **Agrawal, A.**, Nikolaus, M., Favre, B., & Fourtassi, A. (2024). Automatic Coding of Contingency in Child-Caregiver Conversations. Proceedings of the Joint International Conference on Computational Linguistics, Language Resources, and Evaluation (LREC-COLING).

3. Nikolaus, M., **Agrawal, A.**, Kaklamanis, P., Warstadt, A., & Fourtassi, A. (2024). Automatic Annotation of Grammaticality in Child-Caregiver Conversations. Proceedings of the Joint International Conference on Computational Linguistics, Language Resources, and Evaluation (LREC-COLING).

4. Goumri, D., **Agrawal, A.**, Nikolaus, M., VU, T., Bodur, K., Semmar, E., Armand, C., Mazzocconi, C., Gupta, S., Prévot, L., Favre, B., Becerra, L., & Fourtassi, A. (2024). A Developmental Corpus of Child-Caregiver's Face-to-face vs. Video Call Conversations in Middle Childhood. Proceedings of the Joint International Conference on Computational Linguistics, Language Resources, and Evaluation (LREC-COLING).

5. **Agrawal, A.**, Favre, B., & Fourtassi, A. (2024). Analyzing Communicative Intent Coordination in Child-Caregiver Interactions. In Proceedings of the 46th Annual Meeting of the Cognitive Science Society.

6. **Agrawal, A.**, Liu, J., Bodur, K., Favre, B., & Fourtassi, A. (2023). Development of Multimodal Turn Coordination in Conversations: Evidence for Adult-like Behavior in Middle Childhood. In Proceedings of the 45th Annual Meeting of the Cognitive Science Society.

7. **Agrawal, A.** & Rosa, R. (2020). Eyes on the Parse: Using Gaze Features in Syntactic Parsing. Proceedings of the Second Workshop on Beyond Vision and LANguage: inTEgrating Real-world kNowledge (LANTERN). **(Best paper awarded)**

Invited Talks

Workshop on Multimodality in Social Interactions, Institute of Language, Communication and Brain, April 2023

Reviewing Service

Journals:

1. Language and Health
2. Language and Cognition
3. Develomental Cognitive Neuroscience
4. Children and Youth Services

Conferences:

1. Cognitive Science Society Conference (CogSci)

Languages

Mother tongue: Hindi

Fluent: English, Marathi

Basic skills: French, German

Beginner: Czech

Programming Skills

Python, Java, Pytorch, Tensorflow, Javascript, HTML, CSS